INTRA-UTERINE INFECTION WITH ANCYLOSTOMA CANINUM IN DOGS

B

S. ADLER

E. J. CLARK

From the Sir Alfred Lewis Jones Research Laboratory, Freetown, Sierra Leone

(Received for publication 3 September, 1922)

Intra-uterine infection with hookworms has been noted by Howard (1917), who found ova in the stool of a child fourteen days old.

Owing to lack of human material, we examined a number of young animals in order to find whether intra-uterine infection with hookworms is a common occurrence.

Thirteen young dogs (from two to fifteen days old), representing eight different litters, were examined for ancylostomes. The results were as follows:—

Litter	Age in days of dogs	Number examined	A. caninum		Remarks
			Worms	Ova	Remarks
1	2	2	negative	negative	
2	5 5	2	negative	negative	
3	5	2	positive (2)	negative	One infection was intense. Ancylos- tomes up to 7 mm. long with well developed buccal capsules. No ova in the uteri of the worms.
4	7	2	negative	negative	in the dien of the works.
5	13	T	positive	positive	
6	14	2	positive (2)	positive (2)	
7	14	1	negative	negative	
8	15	E	positive	positive	

It thus appears that in Freetown, where intense infections with A, caninum are the rule in dogs, intra-uterine infection is common.

It is noteworthy that, although infection with A. ceylanicum is common in adult dogs, we have not found evidence of intra-uterine infection with this parasite.

Infection of the foetus is possible in two ways:-

- (1) By larvae passing through the maternal blood stream to the placenta, and through the placenta to the foetus.
- (2) By larvae finding their way into the peritoneal cavity of the mother and passing through the uterine muscle to the placenta.

Yoshida (1920) has shown the possibility of this by observing ancylostome larvae in the peritoneal cavity of experimentally infected guinea-pigs; and we have found ancylostome larvae in the peritoneal cavity of a guinea-pig which had been placed for ten hours in a vessel containing a mixed culture of A. caninum and A. ceylanicum.

REFERENCES

HOWARD, H. H. (1917). Pre-natal Hookworm Infection. Jamaica Public Health Bull., pp. 20-24, Ext. Trop. Dis. Bull., March 15, 1920.

Yoshida, Sadao (1920). A New Course for Migrating Ancylostoma and Strongyloides Larvae after Oral Infection. Journ. of Parasit., Vol. VII, No. 1, pp. 46-48.